

# United States Patent [19]

Rogakos et al.

[11] Patent Number: 4,763,936

[45] Date of Patent: Aug. 16, 1988

## [54] POWER OPERATED DOOR LATCH

[75] Inventors: Deno J. Rogakos; Joseph P. Licata,  
both of Dayton, Ohio; John L. Sloan,  
Mt. Clemens, Mich.

[73] Assignee: General Motors Corporation, Detroit,  
Mich.

[21] Appl. No.: 920,651

[22] Filed: Oct. 20, 1986

[51] Int. Cl.<sup>4</sup> ..... E05C 3/26

[52] U.S. Cl. .... 292/201; 292/216;  
292/DIG. 23; 292/280

[58] Field of Search ..... 292/201, 216, 280, 336.3,  
292/144; 70/279

## [56] References Cited

### U.S. PATENT DOCUMENTS

2,898,138	8/1959	Van Noord	292/122
2,943,880	7/1960	Joachim et al.	292/201
2,950,138	8/1960	Meyer et al.	292/229
3,359,767	12/1967	Arlauskas et al.	292/201 X
3,504,511	4/1970	Allen	292/201 X
4,033,616	7/1977	Sheesley	292/216
4,258,945	3/1981	Pouget	292/201 X
4,272,112	6/1981	Schlick et al.	292/201
4,290,634	9/1981	Gelhard	292/201
4,452,058	6/1984	Noel	292/201 X
4,569,544	2/1986	Escaravage	292/201 X

4,586,737	5/1986	Arlauskas	292/216
4,588,217	5/1986	Escaravage	292/216 X
4,624,491	11/1986	Vincent	292/216 X
4,652,027	3/1987	Quantz	292/201

Primary Examiner—Gary L. Smith

Assistant Examiner—Eric K. Nicholson

Attorney, Agent, or Firm—Saul Schwartz

## [57]

### ABSTRACT

An automobile door latch has a fork-type latch bolt, a detent lever which automatically retains the bolt in a closed-latched position in a manual-closed operating mode of the latch when the door is manually swung to the closed position, a manually actuated release lever which moves the detent lever to a releasing position releasing the bolt in a manual-open operating mode of the latch, and a power operating means which power rotates the bolt from an ajar-latched position to the closed-latched position in a power-closed operating mode of the latch and which moves the detent lever to the releasing position in a power-open operating mode of the latch. The door latch further includes an electrical control which automatically actuates the latch in the power-closed operating mode when the latch bolt achieves the ajar-latched position and which permits random sequencing of the manual and the power operating modes of the latch.

6 Claims, 4 Drawing Sheets

